

REMARKS

In the Office Action of September 11, 2000, Claims 1 - 5 were rejected. No Claims was allowed. In response, Claims 1 - 5 are canceled and new Claims 6 - 17 are added to the application. Reexamination and reconsideration are respectfully requested in view of the following remarks.

Support for New Claims

Support for the new claims, particularly for the definition of substituted aryl and substituted heterocyclic groups is found on pages 4 and 5 of the specification

Form 1449 for the Information Disclosure Statement filed August 11, 2000

In the Office Action, the Examiner stated that the required Form PTO-1449 is not present with the Information Disclosure Statement filed August 11, 2000. Applicants' records show that the Form PTO-1449 was properly filed with the Information Disclosure Statement on August 11, 2000. For the Examiner's convenience, an additional copy of the Form PTO-1449 is enclosed with this response.

Objection to Claims 4 and 5 under 37 CFR 1.75

Claims 4 and 5 were objected to as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. In response, Claims 4 and 5 are canceled. New Claims 6 - 17 do not include multiple

dependent claims.

Rejection of Claims 1 - 4 under 35 U.S.C. §112, second paragraph

Claims 1 - 4 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner alleges that the recitation within the definitions of R⁵ and Z of substituted or unsubstituted aryl or substituted or unsubstituted heterocyclic groups is indefinite because the metes and bounds of "substituted" cannot be precisely determined.

It is respectfully submitted that this rejection is overcome in the new Claims 6 - 17, particularly independent Claims 6, 10 and 14 wherein those substituents contemplated within the definition of "substituted aryl" and "substituted heterocyclic" groups are recited.

Claim 1 was rejected on the alleged grounds that the parenthetical subject matter renders the claim indefinite. This rejection is overcome in new Claims 6 - 17, which do not include parenthetical subject matter.

Rejection of Claim 5 under 35 U.S.C. §101

Claim 5 was rejected under 35 U.S.C. §101 as a claim that is not a proper process claim. In response, Claim 5 is canceled. It is respectfully submitted that the new Claims 6 - 17 are proper process claims.

Rejection of Claims 1 - 4 under 35 U.S.C. §112, first paragraph

Claims 1 - 5 were rejected under 35 U.S.C. §112, first paragraph on the alleged grounds that the specification, while

being enabling for exhibiting the pharmacological activity of inhibition of neurodegeneration following the application of four test compounds, as disclosed in Table 2, page 12, does not reasonably provide enablement for compounds of formula I wherein any heterocyclic group is attached.

This rejection is traversed as it may apply to new Claims 6 - 17. In response to the rejection, Applicants submit the Declaration under 37 C.F.R. §1.132 of Shinichiro Toki. The Declaration describes an experiment as to the pharmacological activity of a compound of formula (I) wherein a heterocyclic group is attached. (In compound A, a furyl group is attached; in Compound B, a pyridyl group is attached). The compounds are tested for inhibitory action on neurodegeneration using the procedure set forth in page 9, line 16 to page 11, line 16 in the specification. As shown in Table 2 of the enclosed Declaration, the compounds have inhibitory action on neurodegeneration. Moreover, the Declaration illustrates that undue experimentation is not required to prepare and practice the present invention, since tests to show whether a particular species exhibits inhibitory action can be readily carried out following the directions set forth in the specification. Accordingly, it is respectfully submitted that this rejection is overcome.

**Rejection of Claims 1 - 5 under 35 U.S.C. §102(b) over
Schweiss et al**

Claims 1 - 5 were rejected under 35 U.S.C. §102(b) as anticipated by Schweiss et al (U.S. Patent No. 3,641,010). The

Examiner alleges that Schweiss teaches pharmaceutical compositions of formula I for use as cerebral stimulants. The Examiner further alleges that it is well established in the pharmacology art that the central nervous system stimulant methylphenidate is used in the treatment of attention deficit hyperactivity disorder.

This rejection is respectfully traversed as it may apply to new Claims 6 - 17. Schweiss et al teaches that compounds of formula I of U.S. Patent 3,641,010 are useful as cerebral stimulants of the caffeine type and that the action is generally more pronounced than that of caffeine as determined by standard pharmacological tests such as the "jiggle-cage" test. Examination data are not disclosed in the reference. Furthermore, it is mentioned that the "jiggle-cage" test is a test for spontaneous motor activity evaluation [Ind. J. Physiol. Pharm., Apr-Jun; 20(2)53-38(1976)]. Therefore, Schweiss et al does not demonstrate that the compounds of formula I of U.S. Patent 3,641,010 have usefulness as treatment for attention deficit hyperactivity disorder.

Moreover, Schweiss et al does not disclose or suggest any method of inhibiting neurodegeneration as set forth in Claims 6 - 9 or any method of treating Alzheimer's disease as set forth in Claims 14 - 17. Further, in Claims 10 - 13, relating to a method of treating neurodegenerative disorders, the method is defined as excluding a method of treating attention deficit hyperactivity disorder.

Accordingly, it is respectfully submitted that new Claims are not anticipated by Schweiss et al and would not have been

obvious over this reference.

Rejection of Claims 1 - 5 under 35 U.S.C. §102(b) over Suzuki et al

Claims 1 - 5 were rejected under 35 U.S.C. §102(b) as anticipated by Suzuki et al (U.S. Patent No. 5,484,920). The Examiner alleges that Suzuki teaches pharmaceutical compositions of instant formula I for use in the treatment of Parkinson's disease, a neurodegenerative disorder.

This rejection is traversed as it may apply to new Claims 6 - 17. Suzuki et al does not disclose or suggest any method of inhibiting neurodegeneration as set forth in new Claims 6 - 9 or any method of treating Alzheimer's disease as set forth in new Claims 14 - 17. Further, in new Claims 10 - 13, relating to a method of treating neurodegenerative disorders, the method is defined as excluding a method of treating Parkinson's disease.

Accordingly, it is respectfully submitted that new Claims are not anticipated by Suzuki et al and would not have been obvious over this reference.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that new Claims 6 - 17 are in condition for allowance. Favorable reconsideration is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 CFR § 1.136. Please charge any shortage in fees due in connection with the filing of this

paper, including extension of time fees, to the Deposit
Account No. 01-2135 (Case No. 506.38266X00) and please credit
any excess fees to such Deposit Account.

Respectfully submitted,

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Enclosures:

Form 1449 (Copy of form submitted on August 11, 2000)

Declaration of Shinichiro Toki